Amendments to the CLAIMS:

This listing of the claims dated April 15, 2004 will replace all previous listings of the claims.

In the Claims:

1(amended once). A method of ~~increasing a dynamic range of~~ illuminating a backlit display, said method comprising the step of varying a luminance of a light source illuminating a displayed pixel in response to an intensity value of said pixel and varying the transmittance of a light valve of said display in a non-binary manner.

2(amended once). The method of claim 1 wherein the step of varying a luminance of a light source illuminating a displayed pixel in response to an [a] intensity of value of said pixel comprises the steps of:

(a) determining a luminance of said pixel from said intensity value; and

(b) varying a luminance of said light source according to a relationship of said luminance of said pixel and said luminance of said light source.

3(original). The method of claim 2 wherein said relationship of said luminance of said pixel and said luminance of said light source is a nonlinear relationship.

4(original). The method of claim 2 wherein the step of determining a luminance of a pixel from an intensity value comprises the step of filtering an intensity value for a plurality of pixels.

5(original). The method of claim 4 wherein said relationship of said luminance of said pixel and said luminance of said light source is a nonlinear relationship.

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6(original). The method of claim 4 further comprising the step of sampling a filtered intensity value at a spatial coordinate corresponding to said light source.

7(original). The method of claim 6 further comprising the step of rescaling a sample of said filtered intensity value to reflect a nonlinear relationship between said luminance of said light source and said intensity of said displayed pixel.

8(original). The method of claim 2 wherein the step of varying a luminance of said light source according to a relationship of said luminance of said pixel and said luminance of said light source comprises the steps of:

    (a)   operating said light source at substantially a maximum luminance if a luminance of at least one displayed pixel exceeds a threshold luminance; and

    (b)   otherwise, attenuating said luminance of said light source according to a relationship of said luminance of said light source and a luminance of a plurality of pixels.

9(original). The method of claim 8 wherein the step of attenuating a luminance of a light source according to a relationship of said luminance of said light source and a luminance of a plurality of pixels comprises the step of attenuating said luminance of said light source according to a relationship of said luminance of said light source and a mean luminance of said plurality of pixels.

10(original). The method of claim 9 wherein the step of attenuating a luminance of a light source illuminating a pixel comprises the step of attenuating a luminance of a plurality of light sources illuminating a plurality of pixels comprising a frame in a sequence of video frames.

11(original). The method of claim 10 wherein the step of attenuating a luminance of a plurality of light sources illuminating a plurality of pixels comprising a frame in a sequence of video

frames comprises the step of attenuating said luminance of said light sources for a subset of frames of said sequence, said subset including less than all said frames of said sequence.

12(original). The method of claim 9 wherein said plurality of pixels comprises at least two contiguous pixels.

13(original). The method of claim 1 wherein the step of varying a luminance of a light source illuminating a displayed pixel comprises the step of varying a luminance of a plurality of light sources illuminating a plurality of displayed pixels substantially comprising a frame in a sequence of video frames.

14(original). The method of claim 13 wherein the step of varying a luminance of a plurality of light sources illuminating a plurality of pixels substantially comprising a frame in a sequence of video frames comprises the step of varying said luminance of said light sources for less than all frames of said sequence.

15(amended once). A method of ~~increasing the dynamic range of~~ illuminating a backlit display, said method comprising the steps of:
   (a)   determining a luminance of a pixel of an image from a data value for said pixel;
   (b)   filtering said luminance;
   (c)   determining a maximum of said filtered luminance for a plurality of pixels illuminated by a light element of a backlight;
   (d)   determining a statistical value of said filtered luminance for a plurality of pixels illuminated said light element; ~~and~~
   (e)   illuminating said light element according to a relationship of said maximum of said filtered luminance and said statistical value of said filtered luminance; and
   (f)   varying the transmittance of a light valve of said display in a non-binary manner.

16(original). The method of claim 15 wherein said statistical value of said luminance comprises a mean luminance of said plurality of pixels.

17(original). The method of claim 15 wherein step of illuminating a light element according to a relationship of a maximum of a filtered luminance for a plurality of pixels and a statistical value of said filtered luminance for a plurality of pixels comprises the steps of:

   (a)   illuminating said light source at a maximum luminance if said maximum of said filtered luminance exceeds a threshold luminance; and

   (b)   otherwise, illuminating said light source at an attenuated luminance, said attenuated luminance determined by a relationship of said statistical value of said luminance of said plurality of pixels and a luminance level of said light source,

18(original). The method of claim 17 wherein said relationship of said statistical value of said luminance of said plurality of pixels and a luminance level of said light source is a nonlinear relationship.

19(amended once). A backlit display comprising:

   (a)   a plurality of light source elements;

   (b)   a light valve arranged for <u>non-binary</u> locally modulated transmittance of light from said light source elements, said <u>non-binary</u> locally modulated transmittance being responsive to a data value of an image pixel; and

   (c)   a light source controller to modulate a luminance output of a light source element according to a relationship of said luminance output and said data value of said image pixel.

20(original). The apparatus of claim 19 wherein said light source controller comprises:

(a)   a data processing unit to determine a power to be applied to a light source
       element to cause said light source element to emit a luminance output satisfying
       said to said data value of said image pixel; and

(b)   a light element driver to apply said power to said light source element.

21(amended once). A backlight for a display comprising a plurality of light sources, at least one
       light source being controllable to output light at a luminance level independent of a
       luminance level of light output by another of said light sources and a light valve varying the
       transmittance of light from said display in a non-binary manner.

22(original). The apparatus of claim 21 further comprising a light source driver controlling said
       luminance level of light output by said at least one light source according to a relationship
       of said luminance level of said output light and a data value for a displayed pixel.